



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF FORENSIC SCIENCE

CENTRAL LABORATORY  
A Nationally Accredited Laboratory

700 NORTH 5TH STREET  
RICHMOND, VIRGINIA 23219  
(804) 786-6971

### CERTIFICATE OF INSTRUMENT ACCURACY

INSTRUMENT: Intox EC/IR II  
SERIAL NUMBER: 010520  
CERTIFICATION DATE: May 2, 2014  
DATE RECERTIFICATION DUE: October 29, 2014

The above listed instrument was found to meet all requirements for accuracy and performance established by the Department of Forensic Science as required by §9.1-1101 (B)(3). Measurement traceability is established through the use of reference materials supplied by an ISO/IEC 17025:2005 accredited calibration laboratory.

#### Estimation of Uncertainty of Measurement:

$0.020 \pm 0.004$ g/210 L	$0.150 \pm 0.007$ g/210 L
$0.080 \pm 0.004$ g/210 L	$0.250 \pm 0.007$ g/210 L

The Uncertainty of Measurement is reported at the 99.73% level of confidence and a coverage factor of  $k=3$ . The estimation of the Uncertainty of Measurement is calculated for the Certification process only.

Michelle M. Billeter  
Forensic Scientist

CITY OF RICHMOND  
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 5<sup>th</sup> day of May, 2014 by Michelle M. Billeter

Teresa J. Brewster, Notary Public

My commission expires: April 30, 2017



DBH  
mmB

**Department of Forensic Science  
Breath Alcohol Section  
Instrument Maintenance History  
1/1/1990 To 5/2/2014**

<b>Instrument Serial Number:</b> 010520	<b>As of 02-May-14</b>
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Maintenance Date	Certification Date	Technician Initials	Remarks
02-May-14	02-May-14	DBH (21250)	CERTIFIED.
13-Nov-13	13-Nov-13	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
10-Jul-13	29-May-13	MMB (26417)	REPLACED UPS BACK-UP BATTERY.
29-May-13	29-May-13	DBH (21250)	CERTIFIED.
13-Dec-12	13-Dec-12	DBH (21250)	CERTIFIED.
12-Dec-12	12-Dec-12	DBH (21250)	CERTIFIED.
03-Jul-12	03-Jul-12	TLN (25387)	CERTIFIED. REPLACED DRY GAS STANDARD.
27-Jan-12	18-Jan-12	DBH (21250)	CORRECTED DRY GAS STANDARD EXPIRATION DATE IN INSTRUMENT MEMORY.
18-Jan-12	18-Jan-12	DBH (21250)	CERTIFIED, REPLACED DRY GAS STANDARD.
27-Jul-11	27-Jul-11	DBH (21250)	CERTIFIED
01-Feb-11	01-Feb-11	RJP (22428)	CERTIFIED.
17-Aug-10	17-Aug-10	RJP (22428)	REPLACED DRY GAS STANDARD. CERTIFIED.
01-Mar-10	01-Mar-10	RJP (22428)	CALIBRATED AND CERTIFIED.
23-Sep-09	23-Sep-09	RJP (22428)	CERTIFIED.
11-Sep-09	11-Sep-09	DBH (21250)	CALIBRATED AND CERTIFIED.
01-Jul-09	01-Jul-09	DBH (21250)	CALIBRATED AND CERTIFIED.
14-Apr-09	14-Apr-09	NMJ (22392)	FIRMWARE/SOFTWARE UPGRADE, CERTIFIED.
11-Feb-09	11-Feb-09	NMJ (22392)	CALIBRATED, CERTIFIED AND ACCEPTED.

DBH  
mmb

# INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number 010520 Worksheet Start Date 5/2/2014  
Location DFS-Central  
Address  
DFS Technician Donald Hall License No. 21250

☒ Laboratory ☐ On-Site

Site Specification: No detrimental environmental conditions exist. ☐

Instrument Barometer (mm HG) 753 Reference Barometer (mm HG) 754  
Reference Barometer(RB)Serial # 009109 RB Calibration Due 8/1/2014

## Measurement Assurance Check

Standard (sea level)	PA Target	minimum	maximum	Sample 1
0.300	0.297	0.288	0.305	0.301
Precision		sample min	sample max	Sample 2
0		0.301	0.301	0.301

Standard (sea level)	PA Target	minimum	maximum	Sample 1
0.100	0.099	0.096	0.102	0.100
Precision		sample min	sample max	Sample 2
0		0.100	0.100	0.100

Dry gas standard Lot No. (with tank no.) AG226201-17

☐ Replaced dry gas standard (+O-ring)

☐ Installed at Location

☐ Removed to DFS-Central

Supplies  
Mouthpieces  
Certificates of Analysis  
Operator Worksheet  
Other:



Notes:

Instrument Serial Number

010520

Certification Date

5/2/2014

☐ Calibrated☒ Certified☒ Measurement Assurance Check☒ Instrument Test☐ Troubleshooting/Maintenance Worksheet Completed

(Successful completion denotes satisfactory condition of the item.)

Standard (sea level)	PA Target	minimum	maximum	Sample 1	
0.250	0.248	0.240	0.255	0.246	
Precision		sample min	sample max		
0		0.246	0.246		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	
0.150	0.148	0.143	0.152	0.148	
Precision		sample min	sample max		
0.001		0.148	0.149		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	
0.080	0.079	0.076	0.082	0.080	
Precision		sample min	sample max		
0		0.080	0.080		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	
0.020	0.020	0.017	0.023	0.019	
Precision		sample min	sample max		
0		0.019	0.019		

All measurements are in g/210L

Estimation of Uncertainty of Measurement and traceability records are located within the Breath Alcohol Section

DFS Technician

*Donald B Hall*

Date

*5/2/14*

Issuing Analyst

*Michelle Bell*

Date

*5/5/14*

DBH  
mmb

**Intox EC/IR-II: Certification**

*Department of Forensic Science*

Serial Number: 010520      Test Number: 1439  
Test Date: 05/02/2014      Test Time: 13:27 EDT

Technician Initials: DBH

Dry Gas Target: 0.248

Lot Number: 29612250I2-09      Exp Date: 11/01/2014

Tank Pressure: 169 psi      Barometric Pressure: 753 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	13:27
BLK	0.000	13:28
CHK	0.246	13:29
BLK	0.000	13:31
CHK	0.246	13:31
BLK	0.000	13:33
CHK	0.246	13:34
BLK	0.000	13:36

**Success**

Standard Value (at sea level): 0.250 g/210L

Certification Status: Continued

DBH  
mmb

**Intox EC/IR-II: Certification**

*Department of Forensic Science*

Serial Number: 010520      Test Number: 1440  
Test Date: 05/02/2014      Test Time: 13:38 EDT

Technician Initials: DBH

Dry Gas Target: 0.148

Lot Number: 29512150I2-04      Exp Date: 11/01/2014

Tank Pressure: 615 psi      Barometric Pressure: 752 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	13:39
BLK	0.000	13:40
CHK	0.148	13:40
BLK	0.000	13:42
CHK	0.149	13:42
BLK	0.000	13:44
CHK	0.148	13:45
BLK	0.000	13:46

**Success**

Standard Value (at sea level): 0.150 g/210L

Certification Status: Continued

DBH  
mmB

# **Intox EC/IR-II: Certification**

*Department of Forensic Science*

Serial Number: 010520      Test Number: 1441  
Test Date: 05/02/2014      Test Time: 13:50 EDT

Technician Initials: DBH

Dry Gas Target: 0.079

Lot Number: 07713080I2-01      Exp Date: 05/01/2015

Tank Pressure: 178 psi      Barometric Pressure: 752 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	13:50
BLK	0.000	13:51
CHK	0.080	13:52
BLK	0.000	13:53
CHK	0.080	13:54
BLK	0.000	13:55
CHK	0.080	13:56
BLK	0.000	13:57

## **Success**

Standard Value (at sea level): 0.080 g/210L

Certification Status: Continued

DBH  
mm8

# **Intox EC/IR-II: Certification**

*Department of Forensic Science*

Serial Number: 010520      Test Number: 1442  
Test Date: 05/02/2014      Test Time: 13:59 EDT

Technician Initials: DBH

Dry Gas Target: 0.020

Lot Number: 07713020I1-02      Exp Date: 05/01/2015

Tank Pressure: 232 psi      Barometric Pressure: 752 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	13:59
BLK	0.000	14:00
CHK	0.019	14:01
BLK	0.000	14:02
CHK	0.019	14:03
BLK	0.000	14:04
CHK	0.019	14:05
BLK	0.000	14:06

**Success**

Standard Value (at sea level): 0.020 g/210L

Certification Status: Success

DBA  
mmB

**Intox EC/IR-II: Accuracy Check**

*Department of Forensic Science*

Serial Number: 010520      Test Number: 1443

Test Date: 05/02/2014      Test Time: 14:09 EDT

Dry Gas Target: 0.297

Lot Number: AG322702-09      Exp Date: 08/15/2015

Tank Pressure: 291 psi      Barometric Pressure: 752 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	14:10
CHK	0.301	14:10
BLK	0.000	14:12
CHK	0.301	14:13
BLK	0.000	14:15
CHK	0.301	14:16

Test Status: *Success*

Calibration CRC: CDB91AC2

DBH  
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**Intox EC/IR-II: Accuracy Check**

*Department of Forensic Science*

Serial Number: 010520      Test Number: 1444

Test Date: 05/02/2014      Test Time: 14:19 EDT

Dry Gas Target: 0.099

Lot Number: AG226201-17      Exp Date: 09/18/2014

Tank Pressure: 232 psi      Barometric Pressure: 752 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	14:20
CHK	0.100	14:20
BLK	0.000	14:22
CHK	0.100	14:23
BLK	0.000	14:24
CHK	0.100	14:25

Test Status: *Success*

Calibration CRC: CDB91AC2

DBH  
mmb

INSTRUMENT, TEST,

DFS

HALL, DONALD, B

DFS Central Lab

21250

10/01/2014

05/02/2014

010520

05/02/2014

14:35 EDT

0.00



# IntoxNet MIS Report

Report Generated 02 May 2014 at 15:25

DBH  
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## Test Results

Instrument Serial Number 010520

Test # 001445 Subject Test

Test Location 1 Department of  
Test Date 02 May 2014

Test Location 2 Forensic Science  
Test Time 14:29  
Remote/Local Local

Test Location 3  
System Check Passed

Operator's Last Name HALL  
Agency DFS Central Lab

Operator's First Name DONALD

Operator's Middle Initial B

Card Serial Number 121250

License Number 21250

Effective Date 10/01/2012

Expiration Date 10/01/2014

Subject's Last Name INSTRUMENT

Subject's First Name TEST

Subject's Middle Initial

Subject's Date of Birth 00/00/0000

Subject's Sex Male

Driver's License Number

Driver's License Expiration 00/00/0000

Driver's License State

Court Name DFS

End Date 02 May 2014 End Time 14:37

Result Time 14:35

Result Date 02 May 2014 Result 0.00

Data Type DIAG

Sample Value Pass

Sample Time 14:29

Data Type BLK

Sample Value 0.000

Sample Time 14:30

Data Type CHK

Sample Value 0.100

Sample Time 14:30

Data Type BLK

Sample Value 0.000

Sample Time 14:32

Data Type SUBJ

Sample Value 0.000

Sample Time 14:33

Data Type BLK

Sample Value 0.000

Sample Time 14:34

Data Type SUBJ

Sample Value 0.000

Sample Time 14:35

Data Type BLK

Sample Value 0.000

Sample Time 14:36

Standard Type Dry Gas Std

Standard Value 0.099

Standard Lot Number AG226201-17

Standard Expiration Date 09/18/2014

Tank Pressure 232

Barometric Pressure 752 mmHg

Blow Sample Number 1 Blow Duration 3.48 sec

Blow Volume 1923 cc End-of-Blow Time 14:33

Blow Sample Number 2 Blow Duration 3.96 sec

Blow Volume 2311 cc End-of-Blow Time 14:35

Tamper Evident Stamp 6b9f03fb

Test Status Code 0

Test Status Success